



Collider Accelerator Department  
Building 911A - P.O. Box 5000  
Upton, NY 11973-5000  
Phone 631344 2905  
Fax 631 344 5676  
mvaness@bnl.gov

# Memo

managed by Brookhaven Science Associates  
for the U.S. Department of Energy

Date: June 6, 2002  
To: D.I. Lowenstein  
From: M. Van Essendelft  
Subject: **Assessment of the ISO 14001 EMS Implementation  
Collider-Accelerator Department**

**Date of Audit:** May 20 & 21, 2002

**Objective:** This was an internal Environment Management System (EMS) audit conducted to satisfy the ISO 14001 requirement for such audits and to review program implementation in the Collider-Accelerator Department (CA) in preparation for the upcoming NSF registration audit. All elements of ISO 14001 were covered, however not all procedures and processes supporting CA's EMS were reviewed. The results of this audit are documented in the "Collider-Accelerator EMS Assessment ISO 14001". The "Collider-Accelerator EMS Assessment ISO 14001" and supporting documentation are on file in the C-A Quality Assurance office.

**Scope:** Collider-Accelerator Department

**Auditors:** Four auditors conducted the audit:

- (1) Mel Van Essendelft (ESD/C-A ECR) lead auditor
- (2) Peter Pohlot, (ESD)
- (3) Dick Savage (QPSO)
- (4) Rich DeRocher (QPSO)

**Noteworthy Practices, Minor nonconformances and Recommendations:**

The implementation of the C-A EMS is continuing to mature as it prepares for the upcoming NSF surveillance audit. During the course of the audit there were several noteworthy practices noted as well as 5 observations. It should be noted that minor nonconformances were formerly classed as observations. While observations are not normally tracked through the ATS system, for the purposes of the EMS program observations will be tracked.

There are a number of noteworthy practices found during the course of the audit and they are listed as follows:

1. C-A is actively recycling magnets (BAF & AGS Ring) and other materials in an effort to minimize waste.
2. C-A water systems are being redesigned to minimized potential impacts to the environment – additional closed loop systems, additional PLC monitoring and additional ozone treatment systems.
3. C-A documents its management review with a Record of Decision and tracks those decisions through its Family ATS.
4. C-A has been proactive in communicating the C-A EMS to its employees – notably, this year, through a bulletin entitled C-A Environmental Management System Highlights.

**Minor NCR #1.**      4.3.4 Environmental Management Program

During the review of the Environmental Management Program it was observed that the C-A Family ATS Program is used to assign responsibilities for completion of tasks in achieving objectives and targets and it has not been updated to reflect the newly assigned C-A Environmental Compliance Representative. This change is required to ensure proper notification and awareness for completing tasks (Ref. ATS 774.1.4).

Recommendation: Reassign ATS items to new ECR and review C-A Family ATS additional for similar errors and make all necessary corrections.

**Minor NCR #2.**      4.4.2 Training, Awareness and Competence

During a review of EMS Training it was noted that, while the Drew contractor has the appropriate C-A training, he is not linked to a JTA for that training.

Recommendation: Drew personnel should be linked on the JTA to C-A training and that a review for similar contractor JTA omissions be performed.

**Minor NCR #3**      4.4.5 Document Control

During a review of Web documentation it was noted that the link for the LINAC EMP links to a LINAC process assessment drawing and not to the Environmental Management Program.

Recommendation: The EMP should be corrected and a review of EMS Web documentation be performed.

**Minor NCR #4**      4.4.6 Operational Control

During a review of the Water Systems Group's documentation for responses to make-up alarms it was noted that the CAS Watch had used the form (OPM-ATT-2.19.a) from the previous revision. L. Vogt noted that he had contacted the appropriate individual to discontinue use of the old form.

Recommendation: A follow-up should be performed to assure that all old forms have been thrown out.

**Recommendation #1** Consider including a listing of aspects and related SBMS SA's in Process Assessment.

**Recommendation #2** Consider combining EMP's & OCF's into one document.

**Recommendation #3** Consider incorporating submitted wording improvements into EMS Program Description.

**Recommendation #4** Consider having the ECR review Work Planning forms (green sheets) for Environmental concerns.

**Recommendation #5** Recommend developing a surveillance schedule to audit the entire C-A EMS over a three-year period.

**Audit Interviews:** The auditors interviewed the following C-A personnel: Ed Lessard, Joel Scott, John deBoer, Larry Vogt, Steve Gill, Al Pendzick, John Maraviglia, and Melvin Van Essendelft.

---

D.I. Lowenstein

---

E.T. Lessard

cc.:	D. Barton	J. DeBoer	S. Gill	G. Goode
	J. Hauser	R. Karol	D.I. Lowenstein	E. Lessard
	W. MacKay	J. Maraviglia	A. McNerney	D. Passarello
	A. Pendzick	P. Pile	T. Roser	J. Scott
	L. Vogt	J. Wei		